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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/820,590

04/08/2004

Paul Albert Sagel

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27752 7590 01/25/2007  
THE PROCTER & GAMBLE COMPANY  
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EXAMINER

ROBERTS, LEZAH

ART UNIT

PAPER NUMBER

1614

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

01/25/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	Application No. 10/820,590	Applicant(s) SAGEL ET AL.	
	Examiner Lezah W. Roberts	Art Unit 1614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 November 2006.
- 2a) ☒ This action is **FINAL**.      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3 and 5-16 is/are pending in the application.
- 4a) Of the above claim(s) 13-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

This Office Action is in response to the amendment filed November 6, 2006. All previous rejections have been withdrawn unless stated below.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Response to Election of Species/Restriction Requirement***

Claims 13-16 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on November 6, 2006.

Applicant's election with traverse of invention 1 in the reply filed on November 6, 2006 is acknowledged. The traversal is on the ground(s) that the Office Action does not show the inventions defined by the groups are independent and distinct. The compositions are so closely interrelated with the method claims, in order to preserve unity of invention, should be prosecuted in the same application. This is not found persuasive because the method claims are so broad they do not even specify the polymers used and the only solvent mentioned in the procedure is water. Furthermore the compositions may be made using the same solvent because they are water-soluble polymers.

The requirement is still deemed proper and is therefore made FINAL.

### ***Claims***

#### **Claim Rejections - 35 USC § 103 – Obviousness (New Rejection)**

1) Claims 1-3 and 5-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Godbey et al (US 2002/0187181) in view of Xu et al. (US 2002/0187111).

Godbey et al. teach delivery systems comprising a water-soluble polymeric carrier, an adhesive, one or more active agents and a support layer. The active agent may be incorporated into either one or both of the carrier and the adhesive compositions (paragraph 0008). When the active agent, e.g., whitening agent (paragraph 0051), is in both the adhesive and carrier, the two together encompass the whitening composition. Furthermore, hydrogen peroxide may be separated from other active ingredients by adding one ingredient to the carrier and one to the adhesive (paragraph 0044-0045). The polymers that may be used as carriers include polyvinyl alcohol, which is the one of the preferred polymers, polyoxyalkylenes, which includes polyethylene oxide, and mixtures thereof. The advantage of using polymers of polyvinyl alcohols to prepare the carrier film is that the film may, as a result of its low oxygen permeability, provide protection to oxygen sensitive materials (paragraph 0025). The polyvinyl alcohol used in the examples was 87% hydrolyzed encompassing claim 7. The amount of polyvinyl alcohol used in the compositions ranges from 30 to 35% and is dissolved in water. Plasticizers that may be used include polyethylene glycol, water and

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mixtures and comprise from 1 to 50% of the carrier. Plasticizers are used to form films with reduced brittleness. They comprise up to 80% of the adhesive compositions. The amount of water used in the adhesive compositions comprises up to 60% of the adhesive (paragraph 0041), encompassing the instant claims because the disclosed product has two tooth whitening compositions, one is the adhesive composition and one is the carrier composition. Therefore the adhesive composition meets the water limitation of the instant claims. The carrier adhesives used in the compositions include poly(ethylene oxide) (paragraph 0036). Polymers suitable for use in the adhesive may be an uncrosslinked polymer or mixture of polymers with an overall number average molecular weight between 10,000 and 100,000 Daltons. Such polymers provide a good balance of cohesive strength and water-solubility. The adhesive composition of the device of the present invention may include the polymer in a relative amount of from about 10 to about 60 weight percent of the adhesive composition, encompassing claim 2. The device may be used to deliver whitening agent including hydrogen peroxide (paragraph 0051), encompassing claim 11. The support layer may be a multilayered laminate (paragraph 0057), encompassing claim 8. The reference differs from the instant claims insofar as it does not disclose the teeth whitening devices were packaged and it does not specifically disclose mixtures and the molecular weight of the poly(ethylene oxide) polymers.

Xu et al. teach whitening strips comprising polyethylene oxide. The whitening agents include hydrogen peroxide (paragraph 0011). The ethylene oxide polymer comprises 50 to 95% of the composition (paragraph 0012). The polymer is hydratable

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and varying the properties of the polymer can control the release of the whitening agent. The properties of films are varied by varying film thickness and using a mixture of different molecular weight polyethylene oxide polymers (100,000 –1,500,000 Daltons) (paragraph 0008-0010). The strips are packed in a suitable container (paragraph 0022). The reference differs from the instant claims insofar as it does not teach a second polymer such as polyvinyl alcohol.

It would have been obvious to one of ordinary skill in the art to have used the polyethylene oxides of different molecular weights and mixtures in the compositions of the primary reference motivated by the desire to make an adhesive layer that provides a good balance of cohesive strength, water-solubility and the desired rate of release of the whitening agent, as disclosed by the secondary reference.

It would also have been obvious to one of ordinary skill in the art to have packaged the compositions of the primary reference motivated by the desire to store or the product in a suitable container, as disclosed by the secondary reference.

#### **Obvious-Type Double Patenting (Previous Rejection)**

Claims 1-12 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-12 of copending Application No. 10/820,590. The rejection is maintained in regards to claims 1-3 and 5-12.

Applicant argues the two applications are not the same. This is not persuasive.

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Both sets of claims recite a packaged tooth whitening product comprising a backing layer, a mixture of two polymers, and a whitening agent. The two polymers are polyvinyl alcohol and polyethylene oxide. The whitening agent is recited to be hydrogen peroxide. These limitations recited in the claims make them coextensive.

Claims 1-3 and 5-12 are rejected.

Claims 13-16 are withdrawn.

No claims allowed.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lezah W. Roberts whose telephone number is 571-272-1071. The examiner can normally be reached on 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin H. Marschel can be reached on 571-272-0718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Lezah Roberts  
Patent Examiner  
Art Unit 1614

  
Frederick Krass  
Primary Examiner  
Art Unit 1614